

REF 985090

en

Test 0-90

03.23

NANOCOLOR® Sulfite 100**Method:**

Photometric determination with potassium iodate / iodide

Range:	5 – 100 mg/L SO₃²⁻
Wavelength (HW = 5 – 12 nm):	470 nm
Reaction time:	0
Reaction temperature:	20 – 25 °C

Contents of reagent set:

- 19 test tubes Sulfite 100
- 2 test tubes with 10 mL Sulfite 100 R1
- 1 test tube with 9 mL Sulfite 100 R2
- 1 empty test tube for blank value

Hazard warning:

Reagent R2 contains sulfuric acid 30 – 51 %.

H314 Causes severe skin burns and eye damage.

P260, P280, P301+330+331, P303+361+353, P304+340, P305+351+338 Do not breathe vapors. Wear protective gloves / eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. For further information ask for a safety data sheet.

Preliminary tests:

If the order of magnitude of the concentration in a sample is not known, a preliminary test with QUANTOFIX® Sulfite (10 – 1000 mg/L SO₃²⁻, REF 91306) or with VISOCOLOR® HE Sulfite SU 100 (REF 915008) rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly.

Interferences:

Oxidizing and reducing substances as well as starch interfere with the determination.

2 mg/L ascorbic acid simulate 1 mg/L sulfite.

The method can be used also for the analysis of sea water.

Procedure:

Requisite accessories: piston pipette with tips

Test sample	Blank value
Open test tube, add	Open empty test tube, add
200 µL (= 0.2 mL) R2, shake lightly, slowly add along wall of tube	1.0 mL R1 and
4.0 mL sample solution (<i>the pH value of the sample must be between pH 1 and 13</i>), close and mix. Clean outside of test tube and measure immediately.	200 µL (= 0.2 mL) R2, shake lightly, slowly add along wall of tube
	4.0 mL distilled water, close and mix.
	Clean outside of test tube and measure immediately.

Measurement:

For NANOCOLOR® photometers and PF-12 see manual, test 0-90.

For each analysis a blank value is required.

Sulfite contents below 5 mg/L are to be considered as negative results.

Photometers of other manufacturers:

For other photometers check whether measurement of round glass tubes is possible. Verify factor for each type of instrument by measuring standard solutions.

Analytical quality control:

NANOCONTROL Sulfite (REF 92590)